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A NEW ARABIS.

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IN the spring of 1907 I found an *Arabis*, which was not familiar to me. It was growing on a trap ridge in Southbury, Connecticut, and from its habit as well as its erect young pods I took it at first to be *A. Drummondii* Gray, but was puzzled by some unusual features. Later collections showed the pods spreading or recurving, with seeds similar to those of *A. laevigata* (Muhl.) Poir. I soon learned from Dr. E. H. Eames that he had collected the vernal state of the same plant in a similar situation in the adjoining town of Woodbury and that he also had taken it for *A. Drummondii*. Then Mr. C. A. Weatherby reported collecting at Bolton, Connecticut, further specimens of the same form which, on comparison at the Gray Herbarium, he found to match material there included under *A. laevigata*.

I continued to observe my plant only to be more and more convinced that it was distinct from what I had known as *Arabis laevigata*, and a visit to the Gray Herbarium showed that the two forms were well represented there and were separated by marked and constant characters.

The new plant is bright green and very leafy, averaging in the specimens examined 28 internodes to the first flower. Some or usually all of the lower leaves are deeply lyrate-pinnatifid and the flowers are white with conspicuous petals and on erect pedicels.

Arabis laevigata is less leafy, averaging 13 internodes to the first flower, is strongly glaucous and very rarely has any pinnatifid lower leaves. Its flowers are borne on diverging pedicels and the petals scarcely exceed the calyx. One of the most marked differences between the two plants, and one which appears to be constant, is

to be found in the rosette of leaves of the first year. As I was collecting *Arabis laevigata* for comparison I found growing with it young plants of such a different aspect that I could not at first believe that they were the seedlings of this species, but further observation convinced me that they could be nothing else. These young plants in May and June of the first year produce spatulate to broadly obovate leaves, sometimes reaching 8 cm. long by 4 cm. broad, which are sparsely to somewhat thickly pilose, especially above, with very short stiff hairs. This character seems to have been overlooked for the most part as all the later descriptions which I have consulted as well as most of the earlier ones speak of *Arabis laevigata* as entirely glabrous. However, DeCandolle in his *Systema Naturae* says: — “Folia radicalia superne pilis rigidulis sparsis scabra,” and, as will be seen later, the type-specimen shows just this character. Later in the season the leaves are smaller and more spatulate with fewer hairs, but I have yet to see a specimen of *Arabis laevigata* with the leaves of the first year preserved which does not show upon them some of these characteristic hairs.

In the new plant the leaves of the first year are all spatulate to narrowly obovate and perfectly smooth and glabrous. They are much more persistent than those of *A. laevigata*, being usually well preserved at flowering time and consequently are usually found on herbarium specimens. The flowering season of this plant is two to three weeks later than that of *A. laevigata*. The latter comes into flower in Connecticut about May 1st, or, in exceptional seasons, as early as April 15th and ceases flowering about June 1st. The other I have not been able to find in flower before May 15th and it is in full flower nearly or quite throughout the month of June.

After the observations noted above a question arose as to the identity of the original *Turritis laevigatus* Muhl. This seemed fairly plain from the description of Willdenow but to make the matter more certain Prof. M. L. Fernald kindly obtained for me a tracing of the type-specimen from Berlin. This shows a rather poor specimen, but one, which, with its sagittate-clasping stem-leaves, all undivided, and its obovate pilose radical leaves of the first year, is manifestly the same as the commoner plant which has been familiar as *Arabis laevigata*. I propose the other plant discussed above as

ARABIS viridis n. sp. Planta 2–6 dm. alta, simplex vel paulo ramosa, foliosa, viridis, glabra; foliis radicalibus lanceolato-spatulatis, dentatis

vel lyratis, petiolatis, 2–5 cm. longis, caulinis inferioribus lyratis, mediis dentatis, superioribus minoribus integris, caulinis omnibus sessilibus non amplexicaulibus; floribus racemosis; pedicellis plerumque erectis; petalis albis, 6–8 mm. longis, calycem superantibus; sepalis linearibus vel oblongis, obtusis, 4–5 mm. longis; siliquis junioribus erectis flores superantibus, maturis falcato-recurvatis, 6–9 cm. longis, circa 1.5 mm. latis; seminibus marginatis, quadratis, 1.5–1.8 mm. longis, circa 1 mm. latis.

Plant 2–6 dm. tall, simple or somewhat branched, leafy, green and glabrous; radical leaves lanceolate-spatulate, dentate or lyrate-pinnatifid, petioled, 2–5 cm. long, lower cauline leaves lyrate-pinnatifid, those on the middle of the stem dentate, the upper smaller and entire, all the cauline leaves sessile but not clasping; flowers racemed; pedicels nearly erect; petals white, 6–8 mm. long, exceeding the calyx; sepals linear or oblong, obtuse, 4–5 mm. long; young pods erect, overtopping the flowers, falcate-recurved when mature, 6–9 cm. long, about 1.5 mm. wide; seeds quadrate, margined, 1.5–1.8 mm. long, about 1 mm. wide.

MAINE: South Berwick, June 13 & 14, 1896, *J. C. Parlin* and *M. L. Fernald*; Berwick, July 21, 1898, *J. C. Parlin*. MASSACHUSETTS: wet cliff at Cascade, Melrose, June 5 & 11, *W. P. Rich*; Barry's Woods, Jamaica Plain, June, 1879, *C. E. Faxon*; Medford, July 8, 1885, *C. W. Swan*; Medford, May 31, 1896, *F. S. Collins*; Cascade, Middlesex Fells, June 7, 1900, *J. R. Churchill*; ledges, base of Bearberry Hill, West Roxbury, July 12, 1902, *F. G. Floyd*. CONNECTICUT: dry soil on trap ledge, Southbury, May 16, June 12 and July 25, 1909, *E. B. Harger*, No. 5322 (type-specimen in Gray Herbarium); Bolton, 1907, *C. A. Weatherby*; Talcott Mt., West Hartford, 1896, *H. S. Clark*; and same locality 1898, *A. W. Driggs*; Wethersfield, *C. Wright*; trap cliff by Farmington River, East Granby, July 5, 1909, *E. B. Harger*; Mt. Carmel, Hamden, 1908, *A. E. Blewitt*.

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